



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/574,791	05/19/2000	Stephen G. Dick	1-2-136.1US	9656

24374 7590 12/30/2003

VOLPE AND KOENIG, P.C.
DEPT. ICC
UNITED PLAZA, SUITE 1600
30 SOUTH 17TH STREET
PHILADELPHIA, PA 19103

EXAMINER

NGUYEN, TOAN D.

ART UNIT PAPER NUMBER

2665

DATE MAILED: 12/30/2003

9

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/574,791	DICK ET AL.	
	Examiner	Art Unit	
	Toan D Nguyen	2665	

– The MAILING DATE of this communication appears on the cover sheet with the correspondence address –

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 October 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-28 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-28 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 19 May 2000 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Drawings

1. Figures 1-3 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1, 6-10, 12-15, 18-26 and 28 are rejected under 35 U.S.C. 102(b) as being anticipated by Dent (U.S. Patent 5,430,760).

For claims 1 and 6, Dent discloses random access in mobile radio telephone, the method comprising:

transmitting from the user equipment an access data packet using a selected signature out of a set of signatures and in a time slot of a radio frame (figure 1, col. 5 lines 16-38 and col. 11 lines 53-56);

identifying at a base station the selected signature, the transmission time slot and the transmission radio frame of the access data packet (figure 2, col. 7 lines 25-36);

determining at the base station an uplink scrambling code for the user equipment

based on the identified signature, transmission time slot and transmission radio frame (figure 2, col. 7 lines 44-68);

selectively transmitting from the base station an acknowledgment message based on in part an availability of the determined uplink scrambling code (col. 8 lines 13-23); and

receiving the acknowledgment message at the user equipment and transmitting a subsequent data packet using the determined uplink scrambling code (col. 8 lines 13-23 and col. 15 lines 49-65).

For claims 7-10, 12, 21-22, 24-26 and 28, Dent discloses random access in mobile radio telephone, the method comprising:

defining a maximum number L of frames over which a specific data packet can be transmitted (figure 3A, col. 9 lines 23-25);

defining a set of N predetermined scrambling codes for the common packet channel where $N > L$ (col. 9 lines 32-36); and

defining an association of the scrambling codes based on time slots, such that when one of the scrambling codes is associated with a specific time slot, the next L frames for the specific time slots are associated with different scrambling codes (figure 3B, col. 9 lines 46-57).

For claim 13, the claim is directed to the same subject matter as in claim 6. Therefore, it is subject to the same rejection.

For claims 14-15 and 19, Dent discloses random access in mobile radio telephone, the method comprising:

a user equipment (figure 1) having:

means for transmitting an access data packet using a selected signature out of a set of signatures and in a time slot of a radio frame (figure 1, col. 5 lines 16-38 and col. 11 lines 53-56); and

means for receiving an acknowledgment message and transmitting a subsequent data packet using a determined uplink scrambling code (col. 8 lines 13-23 and col. 15 lines 49-65); and

a base station (figure 2) having:

means for identifying the selected signature, the transmission time slot and the transmission radio frame of the access data packet (figure 2, col. 7 lines 25-36);

means for determining the uplink scrambling code for the user equipment based on the identified signature, transmission time slot and transmission radio frame (figure 2, col. 7 lines 44-68);

means for selectively transmitting an acknowledgment message based on in part the identified signature, transmission time slot and transmission radio frame (col. 8 lines 13-23); and

means for selectively transmitting an acknowledgment message based on in part an availability of the determined uplink scrambling code (col. 8 lines 13-23).

For claim 18, Dent discloses wherein the determined scrambling code is based on a function of the identified signature, transmission time slot and transmission radio frame (figure 2, col. 7 lines 44-68).

For claim 20, the claim is directed to the same subject matter as in claim 7. Therefore, it is subject to the same rejection.

For claim 23, the claim is directed to the same subject matter as in claim 6. Therefore, it is subject to the same rejection.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

6. Claims 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Dent (U.S. Patent 5,430,760) in view of Kokko et al. (U.S. Patent 5,790,534).

For claim 2, Dent does not disclose further comprising if the determined uplink scrambling code is unavailable, transmitting a negative acknowledgment to the user equipment. In an analogous art, Kokko et al. disclose if the determined uplink scrambling code is unavailable, transmitting a negative acknowledgment to the user equipment (col. 5 lines 49-56 and col. 6 lines 19-34).

One skilled in the art would have recognized transmitting a negative acknowledgment to the user equipment to use the teachings of Kokko et al. in the system of Dent. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention, to use the transmitting a negative acknowledgment to the user equipment as taught by Kokko et al. in Dent's system with the motivation being to provide a BS 16 to send to each requesting terminal 12 a transmission permission, or a transmission prohibition (col. 6 lines 41-43).

7. Claims 3-5, 11, 16-17 and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dent (U.S. Patent 5,430,760) in view of Popovic' (U.S. Patent 6,567,482 B1).

For claims 3-4, Dent does not disclose wherein the superframes have a set of 72 radio frames, each radio frame is divided into a set of eight time slots. In an analogous art, Popovic' discloses wherein the superframes have a set of 72 radio frames (col. 2 lines 29-36), each radio frame is divided into a set of eight time slots (col. 3 lines 33-35). Popovic' discloses further wherein the determined scrambling code is based on a function of the identified signature, transmission time slot and transmission radio frame (col. 13 lines 56-59 as set forth in claim 5); wherein the set number of sequential radio frames is eight and the set number of time slots in each radio frame is eight (col. 3 lines 33-35 as set forth in claim 11); wherein the superframes have a set of 72 radio frames (col. 2 lines 31-36), each radio frame is divided into a set of eight time slots (col. 3 lines 33-35 as set forth in claims 16-17); wherein the set number of sequential radio frames is eight and the set number of time slots in each radio frame is eight (col. 3 lines 33-35 as set forth in claim 27).

One skilled in the art would have recognized the superframes to use the teaching of Popovic' in the system of Dent. Therefore, it would have been obvious to one of ordinary skill in

the art at the time of the invention, to use the superframes as taught by Popovic' in Dent's system with the motivation being to provide for each radio channel which is divided into a series of time slots, each of which contains a block of information from a user (col. 2 lines 31-33).

Response to Arguments

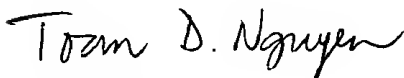
8. Applicant's arguments with respect to claims 1-28 have been considered but are moot in view of the new ground(s) of rejection.

Contact Information

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Toan D Nguyen whose telephone number is 703-305-0140. The examiner can normally be reached on Monday- Friday (7:00AM-4:30PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Huy Vu can be reached on 703-308-6602. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9314 for regular communications and 703-872-9314 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-9600.


Toan D. Nguyen